

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-15. Cancelled (Without disclaimer or prejudice)

16. (Currently Amended) A method of self-monitoring operation of a proximity sensor comprising at least a transmitter, a receiver, and first and second lightguides, including the steps of:

producing a beam in the transmitter;

transmitting the beam into the first lightguide with the first lightguide having a surface through which a first light beam is transmitted to exit the first lightguide;

splitting the beam into a the first beam and a second beam, within the first lightguide before the first beam is transmitted through the surface of the first lightguide to exit the first lightguide;

transmitting the second beam into the second lightguide;

directing the second beam towards the receiver; and

the receiver receiving and analyzing the second beam to determine the operation of the proximity sensor.

17. (Previously Presented) A method according to claim 16, wherein:
the receiving and analyzing by the receiver is executed by
detecting the second beam.

18. (Previously Presented) A method according to claim 16, wherein:
the lightguides are made in one piece.

19. (Currently Amended) A lightguide system for the use with a proximity
sensor comprising:

a first lightguide which directs a first beam into a first predefined
direction with the first lightguide having a surface through which the first light beam is
transmitted to exit the first lightguide;

a second lightguide which directs a reflection of the first beam into a
second predefined direction;

a beam splitter within the first lightguide which splits an incident beam
into a the first beam and a second beam before the first beam is transmitted through
the surface of the first lightguide to exit the first lightguide;

a beam directing device which directs the second beam from the first
lightguide the second lightguide; and

the second light guide comprises a beam directing device, which
directs the second beam into the second predefined direction.

20. (Previously Presented) A lightguide system according to claim 19,
wherein:

the beam splitter is a light directing device.

21. (Previously Presented) A lightguide system according to claim 19,
wherein:

the beam directing device directs the second beam from the first
lightguide to the second lightguide via surfaces which also direct the first beam.

22. (Previously Presented) A lightguide system according to claim 19,
wherein:

the second beam is directed from the first lightguide to the second
lightguide via surfaces which did not direct the first beam.

23. (Previously Presented) A lightguide system according to claim 19
wherein:

the lightguides are made in one piece.

24. (Currently Amended) A proximity sensor, comprising:

a transmitter comprising a first lightguide which directs a first beam into a first predefined direction and which includes a surface through which the first beam is transmitted to exit the first lightguide;

a receiver;

a lightguide system used with the receiver;

a second lightguide which directs a reflection of the first beam into a second predefined direction;

a beam splitter within the first lightguide which splits an incident beam into a the first beam and into a second beam before the first beam is transmitted through the surface of the first lightguide to exit the first lightguide;

a beam directing device which directs the second beam from the first lightguide into the second lightguide; and wherein

the second lightguide comprises a beam directing device which directs the second beam into the second predefined direction.

25. (Currently Amended) A device including a proximity sensor comprising:

- a transmitter including a first lightguide which directs a first beam into a first predefined direction and which includes a surface through which the first beam is transmitted to exit the first lightguide;
- a receiver;
- a lightguide system used with the receiver;
- a second lightguide which directs a reflection of the first beam into a second predefined direction;
- a beam splitter within the first lightguide which splits an incident beam into ~~a~~ the first beam and into a second beam before the first beam is transmitted through the surface of the first lightguide to exit the first lightguide; and
- a beam directing device which directs the second beam from the first lightguide into the second lightguide; and wherein

the second lightguide comprises a beam directing device which directs the second beam into the second predefined direction.

26. (Previously Presented) A lightguide system according to claim 20, wherein:

the second beam is directed from the first lightguide to the second lightguide via surfaces which ~~did~~ do not direct the first beam.

27. (Previously Presented) A lightguide system according to claim 20,
wherein:

the directing device directs the second beam from the first lightguide to
the second lightguide via surfaces which also direct the first beam.

28. (Previously Presented) A lightguide system according to claim 26,
wherein:

the second beam is directed from the first lightguide to the second
lightguide via surfaces which ~~did~~do not direct the first beam.